**From:** Coltrain, Katrina
**To:** McMillan, Teresa
**Subject:** RE: Wilcox SAP COPCs
**Date:** Tuesday, March 29, 2016 4:53:00 PM

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Teri, please see some of my adjustments.

Soil:
VOCs
EDB - Method 8011 – need low detection limit
PAHs (SIM)
SVOCs
TAL metals (Al, Ca, Fe, Mg)
Mercury, and
Cyanide.

pH has a very short holding time. Can this be collected in the field?

This seems a bit much for NORM. Do we need this level of investigation? Perhaps, phase 1 involves some screen to see if more is needed as outlined below.

Analysis for NORM/TENORM is anticipated to be performed on soil, surface water, sediment, ground water, and waste. NORM/TENORM analyses include the following:
Soil: Gamma spectroscopy NORM, gross alpha/beta, total uranium, and total thorium.
Water: gamma spectroscopy (radium-226/228), gross alpha/beta, total uranium, and total thorium.

Katrina Higgins-Coltrain
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**From:** McMillan, Teresa [mailto:tmcmillan@eaest.com]
**Sent:** Tuesday, March 29, 2016 4:16 PM
**To:** Coltrain, Katrina <coltrain.katrina@epa.gov>
**Subject:** FW: Wilcox SAP COPCs

Here you go.

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**From:** Radu, Cristina
**Sent:** Tuesday, March 29, 2016 12:53 PM
**To:** Vega, Luis <lvega@eaest.com>
**Cc:** McMillan, Teresa <tmcmillan@eaest.com>; Moss, Pamela <pmoss@eaest.com>; Stroup, Jason <jstroup@eaest.com>
**Subject:** RE: Wilcox SAP COPCs

Here is what I have in the SAP:

The current COPCs at the site are as follows:

1. VOCs

EDB - Method 8011 – need low detection limit
PAHs
SVOCs
TAL metals
Mercury, and
Cyanide.

In addition, a select number of soil samples in the process areas (5 percent) of the shallow surface soil samples (0.0-0.6 ft bgs) will also be analyzed for:
PCB
Pesticides
Dioxins/furans.

Moreover, a limited number of shallow soil samples (0.0 to 0.5 ft bgs), surface water, sediment, ground water, and waste will also be analyzed for NORM/TENORM.

The COPCs for the site will be initially applied conservatively to all media across the investigation, as the set of COPCs cannot be refined until source characterization has been completed.
Additional testing will be performed, as follows:
Surface water:
Dissolved metals
pH
Hardness
Total dissolved solids (TDS)
Total suspended solids (TSS)
Alkalinity
Organic carbon
Acid volatile sulfide (AVS)
Sediment samples:
Grain size (20 percent of samples)
Total organic carbon
pH

The samples associated with Source No. 1, the Cooling Pond, will also be analyzed for hexavalent chromium.

Analysis for NORM/TENORM is anticipated to be performed on soil, surface water, sediment, ground water, and waste. NORM/TENORM analyses include the following:
Soil: Gamma spectroscopy NORM, gross alpha/beta, total uranium, and total thorium.
Water: gamma spectroscopy (radium-226/228), gross alpha/beta, total uranium, and total thorium.

Cristina Radu
Cell: 505/681.6894